

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-11. (canceled)

12. (new) Peptide sequence characterized in that it comprises or is constituted by a fragment of at least approximately 10 amino acids originating from the following sequence SEQ ID NO: 1:

TPVQNKRRRS<sub>p</sub>VTPPEEQE SEQ ID NO: 1

in which the serine residue in position 10 is phosphorylated,

said above-mentioned fragment containing said phosphorylated serine residue.

13.(new) Peptide sequence according to claim 12, characterized in that it comprises or is constituted by the following sequence SEQ ID NO: 2:

QNKRRRS<sub>p</sub>VTPPEEQ SEQ ID NO: 2

in which the serine residue in position 7 is phosphorylated.

14.(new) Peptide sequence according to claim 12, characterized in that it comprises or is constituted by one of the following sequences:

- sequence SEQ ID NO: 3, representing the CDC25B1 splicing variant of the protein of human origin of CDC25B

phosphatase, the serine residue in position 339 of which is phosphorylated, or

- sequence SEQ ID NO: 4, representing a CDC25B2 splicing variant of the protein of human origin of CDC25B phosphatase, the serine residue in position 312 of which is phosphorylated, or

- sequence SEQ ID NO: 5, representing a CDC25B3 splicing variant of the protein of human origin of CDC25B phosphatase, the serine residue in position 353 of which is phosphorylated, or

- sequence SEQ ID NO: 6, representing a CDC25B4 splicing variant of the protein of human origin of CDC25B phosphatase, the serine residue in position 374 of which is phosphorylated, or

- sequence SEQ ID NO: 7, representing a CDC25B5 splicing variant of the protein of human origin of CDC25B phosphatase, the serine residue in position 361 of which is phosphorylated.

15. (new) Polyclonal or monoclonal antibody capable of recognizing a peptide sequence according to claim 12.

16. (new) Polyclonal antibody capable of recognizing the sequence SEQ ID NO: 2 as defined in claim 13.

17. (new) Process for the preparation of a monoclonal antibody directed against the peptide sequence SEQ ID NO: 2 as defined in claim 13, characterized in that it comprises the following steps:

- the immunization of an animal by injection of the peptide sequence according to claim 13,

- the fusion between myelomas of an animal and splenocytes of an animal in order to obtain hybridomas,
- the culturing of the hybridomas thus obtained, and
- the recovery and purification by cloning of a hybridoma, chosen from those obtained in the previous step and secreting, an antibody directed against the peptide sequence according to claim 13.

18. (new) Pharmaceutical composition characterized in that it contains, as active ingredient, a peptide sequence according to claim 12, a polyclonal or monoclonal antibody capable of recognizing said peptide sequence in association with a pharmaceutically acceptable vector.

19. (new) A method for the treatment of cancers, such as breast cancers, comprising the administration of an appropriate amount of a peptide sequence according to claim 12 and a polyclonal or monoclonal antibody capable of recognizing said peptide sequence to a patient in need thereof.

20. (new) A method for *in vitro* diagnosis or prognosis of cancers in humans or animals, in particular breast cancers, comprising the administration of an antibody according to claim 15 to a patient in need thereof.

21. (new) Method for *in vitro* diagnosis or prognosis of cancers, in particular breast cancers, in humans or animals, characterized in that it comprises:

- placing a polyclonal or monoclonal antibody capable of recognizing a peptide sequence according to claim 12 in the presence of a biological sample taken from an individual,

said antibody being, if appropriate, fixed on a solid support, and

- the detection of said peptide sequence according to claim 12, which is liable to be present in the biological sample using labelled reagents, in particular labelled antibodies, recognizing either the antibody bound to said peptide sequence, or the peptide sequence bound to said antibody in the complexes formed during the previous step between the antibody and the peptide sequence which is liable to be present in the biological sample, this occurring, if appropriate, after suitable rinsing of the solid support.

22. (new) Method for screening a molecule capable of binding to a peptide sequence according to claim 12, said molecule being liable to be used as an antitumoral agent or antiproliferative agent, characterized in that it comprises:

- placing said molecule in the presence of the above-mentioned peptide sequence, and

- the detection of the binding of said molecule by the use of appropriate competition methods, in particular competition with the binding of a polyclonal or monoclonal antibody capable of recognizing said peptide sequence.